REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Non-Final Office Action dated July 27, 2005 has been received and its contents carefully reviewed.

Claim 1, 11, 17 and 19 are hereby amended. Claims 12-14 are hereby canceled. Claims 1-11 and 15-21 are pending. Claims 2, 3, 8-10, 15 and 18 are withdrawn from consideration. Accordingly, claims 1, 4-7, 11, 16, 17 and 19-21 are examined. Reexamination and reconsideration of the examined claims are respectfully requested.

In the Office Action, claims 1, 4-7, 11-14, 16, 17 and 19-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,245,469 to Shiba et al. (hereinafter "Shiba") in view of J.P. No. 09138410 toYamamoto et al. (hereinafter "Yamamoto").

Claim 1 is allowable over Shiba in view of Yamamoto in that the claim recites a combination of elements including, for example, "forming an alignment layer on the first substrate using an ink jet method and concurrently forming a plurality of holes that expose portions of the first substrate." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Shiba merely teaches selectively exposing a photoresist layer using a photomask to form a pattern. This pattern is used as a mask to pattern the underlying electroconductive film. After these photolithographic steps, a resin is injected into the throughholes. See column 5, lines 30-50. Thus, Shiba does not teach "forming an alignment layer...and concurrently forming a plurality of holes." Furthermore, Shiba does not teach "forming an alignment layer...using an inkjet method" as acknowledged by the Examiner on page 3 of the Office Action.

Applicant respectfully submits Yamamoto fails to cure the deficiencies of Shiba. Yamamoto merely discloses controlling the placement of released ink to form an oriented film for a liquid crystal display element. See Abstract. Therefore, Yamamoto does not teach or suggest "forming an alignment layer on the first substrate using an ink jet method and concurrently forming a plurality of holes that expose portions of the first substrate." Therefore, Yamamoto does not cure the defects associated with Shiba.

Furthermore, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine Shiba and Yamamoto and arrive at the claimed invention with any reasonable expectation of success. Shiba is drawn to depositing resin into holes to form spacers having uniform height, while Yamamoto is drawn to controlling the placement of released ink to form an oriented film on a substrate. One of ordinary skill in the art would not look to depositing resin into holes when concerned with forming an oriented film on substrate using ink. Therefore, Applicant respectfully submits that Shiba and Yamamoto are non-analogous art for purposes of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention, and not from Shiba or Yamamoto, which is impermissible. Accordingly, Applicant respectfully submits that claim 1, and claims 4-7 which depend therefrom, are allowable over Shiba in view of Yamamoto.

Claim 11 is allowable over Shiba in view of Yamamoto in that the claim recites a combination of elements including, for example, "forming an alignment layer having a plurality of holes on one of the lower substrate and the upper substrate using an ink jet method." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Shiba merely teaches selectively exposing a photoresist layer using a photomask to form a pattern. This pattern is used as a mask to pattern the underlying electroconductive film. After these photolithographic steps, a resin is injected into the throughholes. See column 5, lines 30-50. Thus, Shiba does not teach "forming an alignment layer having a plurality of holes." Furthermore, Shiba does not teach "forming an alignment layer...using an inkjet method," as acknowledged by the Examiner on page 3 of the Office Action.

Applicant respectfully submits Yamamoto fails to cure the deficiencies of Shiba. Yamamoto merely discloses controlling the placement of released ink to form an oriented film for a liquid crystal display element. See Abstract. Therefore, Yamamoto does not teach or suggest "forming an alignment layer having a plurality of holes on one of the lower substrate and the upper substrate using an ink jet method." Therefore, Yamamoto does not cure the defects associated with Shiba.

Furthermore, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine Shiba and Yamamoto and arrive at the claimed invention with any reasonable expectation of success. Shiba is drawn to depositing resin into holes to form spacers having uniform height, while Yamamoto is drawn to controlling the placement of released ink to form an oriented film on a substrate. One of ordinary skill in the art would not look to depositing resin into holes when concerned with forming an oriented film on substrate using ink. Therefore, Applicant respectfully submits that Shiba and Yamamoto are non-analogous art for purposes of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention, and not from Shiba or Yamamoto, which is impermissible. Accordingly, Applicant respectfully submits that claim 11 is allowable over Shiba in view of Yamamoto.

Claim 16 is allowable over Shiba in view of Yamamoto in that the claim recites a combination of elements including, for example, "applying a first alignment layer along an entire surface of the lower substrate using an ink jet method; applying a second alignment layer along a surface of the upper substrate using the ink jet method, the second alignment layer having a plurality of holes that expose surface portions of the upper substrate." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Shiba merely teaches selectively exposing a photoresist layer using a photomask to form a pattern. This pattern is used as a mask to pattern the underlying electroconductive film. After these photolithographic steps, a resin is injected into the throughholes. See column 5, lines 30-50. Thus, Shiba does not teach "applying a second alignment layer along a surface of the upper substrate using the ink jet method, the second alignment layer having a plurality of holes that expose surface portions of the upper substrate." Furthermore, Shiba does not teach "applying a first alignment layer...using an inkjet method" or "applying a second alignment layer...using the inkjet method," as acknowledged by the Examiner on page 3 of the Office Action.

Applicant respectfully submits Yamamoto fails to cure the deficiencies of Shiba. Yamamoto merely discloses controlling the placement of released ink to form an oriented film for a liquid crystal display element. See Abstract. Furthermore, Yamamoto is silent with respect to applying two alignment layers with an inkjet method. Therefore, Yamamoto does not teach or suggest "applying a first alignment layer along an entire surface of the lower substrate using an

ink jet method; applying a second alignment layer along a surface of the upper substrate using the ink jet method, the second alignment layer having a plurality of holes that expose surface portions of the upper substrate." Therefore, Yamamoto does not cure the defects associated with Shiba.

Furthermore, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine Shiba and Yamamoto and arrive at the claimed invention with any reasonable expectation of success. Shiba is drawn to depositing resin into holes to form spacers having uniform height, while Yamamoto is drawn to controlling the placement of released ink to form an oriented film on a substrate. One of ordinary skill in the art would not look to depositing resin into holes when concerned with forming an oriented film on substrate using ink. Therefore, Applicant respectfully submits that Shiba and Yamamoto are non-analogous art for purposes of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention, and not from Shiba or Yamamoto, which is impermissible. Accordingly, Applicant respectfully submits that claim 16 is allowable over Shiba in view of Yamamoto.

Claim 17 is allowable over Shiba in view of Yamamoto in that the claim recites a combination of elements including, for example, "dispensing a first alignment material on some portions of the first substrate to expose the other portions of a first surface of the first substrate using an ink jet method; dispensing the first alignment material on some portions of the second substrate to expose the other portions of a second surface of the second substrate." None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention. In contrast, Shiba merely teaches selectively exposing a photoresist layer using a photomask to form a pattern. This pattern is used as a mask to pattern the underlying electroconductive film. After these photolithographic steps, a resin is injected into the throughholes. See column 5, lines 30-50. Thus, Shiba does not teach "dispensing a first alignment material on some portions of the first substrate to expose the other portions of a first surface of the first substrate using an ink jet method; dispensing the first alignment material on some portions of the second substrate to expose the other portions of a second surface of the second substrate." Furthermore, Shiba does not teach "dispensing...alignment material...using an inkjet method," as acknowledged by the Examiner on page 3 of the Office Action.

Applicant respectfully submits Yamamoto fails to cure the deficiencies of Shiba. Yamamoto merely discloses controlling the placement of released ink to form an oriented film for a liquid crystal display element. See Abstract. Furthermore, Yamamoto is silent with respect to "dispensing...alignment material" on two substrates. Therefore, Yamamoto does not teach or suggest "dispensing a first alignment material on some portions of the first substrate to expose the other portions of a first surface of the first substrate using an ink jet method; dispensing the first alignment material on some portions of the second substrate to expose the other portions of a second surface of the second substrate." Therefore, Yamamoto does not cure the defects associated with Shiba.

Furthermore, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine Shiba and Yamamoto and arrive at the claimed invention with any reasonable expectation of success. Shiba is drawn to depositing resin into holes to form spacers having uniform height, while Yamamoto is drawn to controlling the placement of released ink to form an oriented film on a substrate. One of ordinary skill in the art would not look to depositing resin into holes when concerned with forming an oriented film on substrate using ink. Therefore, Applicant respectfully submits that Shiba and Yamamoto are non-analogous art for purposes of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention, and not from Shiba or Yamamoto, which is impermissible. Accordingly, Applicant respectfully submits that claim 17, and claims 19-21 which depend therefrom, are allowable over Shiba in view of Yamamoto.

Applicants herewith file a Revocation of Power of Attorney with New Power of Attorney and a Statement under 37 CFR 3.73(b) indicating that the undersigned is Attorney of Record.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

By Valerie P. Hayes

Valerie P. Hayes
Registration No.: 53,005
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorneys for Applicant